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PRE-APPEAL BRIEF REQUEST FOR REVIEW		SCS-124-1146
	Application Number	Filed
	40/565 450	January 10, 2006
	10/565,152 First Named Inventor	January 19, 2006
	MCNIE	
	Art Unit	Examiner
	2874	C. Smith
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.		
This request is being filed with a notice of appeal.		
The review is requested for the reason(s) stated on the attached sheet(s).  Note: No more than five (5) pages may be provided.		
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Applicant/Inventor		Signature
Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96)	V	Stanley C. Spooner
	T	yped or printed name
Attorney or agent of record 27,393	<del></del>	702.046.4000
(Reg. No.)	Requi	703-816-4028 ester's telephone number
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Attorney or agent acting under 37CFR 1.34.		July 17, 2009
Registration number if acting under 37 C.F.R. § 1,34	•	Date
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*		
★ *Total of 1 form/s are submitted.  ★ *To		

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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### STATEMENT OF ARGUMENTS IN SUPPORT OF PRE-APPEAL BRIEF REQUEST FOR REVIEW

The following listing of clear errors in the Examiner's rejection and his failure to identify essential elements necessary for a *prima facie* basis of rejection is responsive to the fifth non-final Official Action mailed March 17, 2009 (Paper No. 20090312).

Applicants note that this is in response to the 5<sup>th</sup> non-final Official Action in this application. Applicants' undersigned representative pointed out a number of errors in the Official Action to Examiner Smith in a telephone interview on July 16, 2009 noting the failure to properly construe the "means plus function" claim elements, but in a follow-up telecom on July 17, the Examiner indicated that his position was firm. Applicant's view is that the Board will not uphold the below listed failures on the Examiner's part and the Examiner will ultimately be required to reopen prosecution. The PTO's delays in prosecution of this application are regretted.

# Error #1. The Examiner fails to properly construe the claim language of independent claims 1, 22, 23 and 47 in accordance with 35 USC §112 (6<sup>th</sup> paragraph)

On page 3 of the Official Action, the Examiner dismisses the claim language "for information modulating" as being a functional recitation. The Examiner apparently misunderstands the claim language which reads "modulation means for information modulating radiation output by each of said one or more lasers." The use of the word "means" provides a legal presumption that "means-plus-function" format under §112 (6<sup>th</sup> paragraph) is being used by the applicant. By definition, "means-plus-function" language includes "functional" limitations. The Examiner's failure to properly construe Applicants' independent claims and specifically including the terms "modulation means" and "output means" as covering the corresponding structures disclosed in the specification (and equivalents thereto) is clearly violative of 35 USC §112 (6<sup>th</sup> paragraph) and is reversible error.

### Error #2. The Examiner fails to provide any evidence of the Foord reference teaching a "quarter-wave plate"

Applicants raised a legitimate question with respect to the Foord reference in the previously filed Amendment (in the paragraph bridging pages 15 and 16) as to where the Foord reference teaches any "quarter-wave plate." While Applicants noted that the Foord reference does include a reference to a "half-wave plate" on the left-hand side of Figure 1(a) on page 347, there appears to be no reference to the quarter-wave plate the Examiner suggests is disclosed.

The Examiner's Official Action merely restates that Applicant is advised to look at page 347 as both Figures show a quarter-wave plate. However, the Examiner again fails to identify any portion of page 347 or its figures as purporting to show a "quarter-wave plate." Even during the telephone interview the Examiner did not indicate where there was any ¼ wave plate. Inasmuch as the burden is on the Examiner to establish where a prior art reference teaches a claimed element (in this instance the Examiner alleges that a quarter-wave plate "is a modulator"), he has failed to meet his burden. The repeated failures of the Examiner to identify any portion of the Foord reference containing a quarter-wave plate is reversible error..

# Error #3. The Examiner also errs in concluding that a quarter-wave plate discloses modulation of a beam, let alone "information modulating" of a beam

Again, Applicants raised this issue in the previously filed Amendment in the first full paragraph on page 16, asking the Examiner to provide any evidence he might have for his conclusion that a "quarter-wave plate" modulates a laser beam travelling therethrough. As will be obvious to anyone of ordinary skill in the art, a laser beam is a steady state beam when it strikes the plate <u>and</u> when it leaves the plate. While the polarization of the beam may be shifted by passage through the quarter-wave plate, there is no modulation of the beam in any fashion, let alone Applicants' claimed "information modulating" of the beam.

Again, the Examiner's failure to provide evidence to substantiate his claim for the operation of a "quarter-wave" plate, even if one were disclosed in the Foord reference, is reversible error and reversal on this basis alone is respectfully requested.

## Error #4. The Examiner identifies no prior art reference which discloses Applicants' "modulation means for information modulating radiation output" by a laser

In the rejection on page 3, the Examiner improperly ignores the means-plus-function language of the independent claims. However, a review of the Jenkins reference indicates that there is clearly no "modulation" of a laser beam taking place, let alone "information" modulation of the laser beam as claimed. The Examiner attempts to cure this deficit in his erroneous definition of the term "modulate" on page 2 of the outstanding Official Action by saying that "modulate" means "to adjust to or keep in proper measure or proportion." That is one definition of the word "modulate" but not the definition used by those in the field of the claimed invention. The opening two lines of Applicants' specification states "the present invention relates to optical transmitter and receiver apparatus, and more particularly to such apparatus for use in telecommunication systems and the like." The well-known definition of "modulate" in the telecommunications field is as set out in Webster's Ninth New Collegiate Dictionary at page 763, i.e., "to vary the amplitude, frequency, or phase of [a carrier wave or a light wave) for the transmission of intelligence (as by radio)." That some "intelligence" is transmitted by the modulation is also included in the definition used in Applicants' specification, i.e., "information modulating."

With respect to the Jenkins patent, the Examiner merely references column 27, lines 32-35 as support for his conclusion that Jenkins somehow teaches Applicants' claimed "modulation means." As noted above, the Examiner improperly construed this claim term and therefore committed reversible error. However, even if the Examiner had properly construed the

claim term, there is no evidence suggesting that Jenkins teaches such a modulation means because there is no indication in Jenkins, or even in the paragraph cited by the Examiner, that there is any "information modulation" taking place. The Examiner states, on page 3, line 6, that Jenkins teaches a "modulation means (850)" but a review of the Jenkins reference at column 24, line 59 indicates that item 850 is a "waveguide" which is certainly not an information modulator of any type. While the Examiner argues that Jenkins teaches the claimed "output means," by virtue of the fact that he fails to properly construe the claim, he apparently doesn't appreciate whether or how Jenkins teaches Applicants' claimed "output means."

Accordingly, the Examiner does not meet his burden of proving that the Jenkins patent discloses both Applicants' claimed "modulation means" and "output means" and therefore the Examiner fails to meet his burden of proof of establishing anticipation under 35 USC §102 and therefore any further rejection of independent claims 1, 22, 23 and 47 is respectfully traversed.

Error #5. The Examiner fails to meet his burden of establishing a prima facie case of obviousness by establishing that the claimed "modulation means" and the claimed "output means" are shown somewhere in the Foord/Akashi combination

On page 5 of the Official Action, the independent claims and claims dependent thereon are indicated as obvious under 35 USC §103 over the Foord/Akashi combination. However, as noted above, the Examiner provides no proper construction of these claims or the claim terms and therefore, by definition ,cannot have indicated in any fashion how the cited prior art teaches the claim elements. The Examiner fails to identify where the Foord reference teaches the claimed "modulation means for information modulating radiation." As discussed above, the Examiner's misunderstanding of the definition of "modulate" (as the term is used in the field of radio and optical communications to which the present invention relates) has perhaps misled the Examiner. Even with the Examiner's definition, while a quarter-wave plate might adjust the

polarization of a laser beam, it cannot impress upon that laser beam any "intelligence" (as required by Webster's definition of "modulate").

The Examiner's admission that Foord is "silent to an output means for outputting the modulated radiation" is very much appreciated. The Examiner contends that Akashi teaches the claimed output means, but does not provide any claim construction of the "output means" or identification of the "output means" in Akashi as being an example of the output means used in Applicants' specification and thus covered by Applicants' claims.

Additionally, the Examiner fails to meet his burden of establishing some reason or motivation for combining references under the *KSR* decision. The Supreme Court has recently noted that "mere conclusory statements" of obviousness are insufficient to meet the Examiner's burden. The Examiner has provided no analysis as to how or why one of ordinary skill in the art would pick and choose elements from the Foord and Akashi references and then combine them in the manner of Applicants' independent claims. Accordingly, any further rejection under 35 USC §103 is respectfully traversed.

#### **SUMMARY**

First and foremost, the Examiner fails to properly construe the "modulation means" and the "output means" in the independent claims. He fails to indicate where these properly construed claim elements are in the cited prior art. He also fails to meet his burden of providing some reasonable analysis as to why one would combine features from the prior art in the manner of the pending claims. There is simply no *prima facie* basis for "anticipation" or "obviousness."

As a result of the above, there is simply no support for the rejection of Applicants' independent claim 1 or claims dependent thereon under 35 USC §102 and/or §103. Applicants respectfully request that the Pre-Appeal Panel find that the application is allowed on the existing claims and prosecution on the merits should be closed.